1. (Currently Amended) A semiconductor package for enhancing heat dissipation, comprising:

a die having an active surface;

a leadframe, including:

D1

a die pad having a first surface and a second surface, said die being attached to said first surface of the die pad; and

a plurality of leads electrically connected to the active surface of said die, said leads having a first surface and a second surface opposite the first surface;

an encapsulant sealing said die and at least a portion of the first surface of the leads in said leadframe but not sealing the second surface of the leads; and

a heat sink attached to the second surface of said die pad and at least a portion of the second surface of leads in said plurality of leads with a thermally conductive and electrically insulating adhesive glue, said heat sink ~~being~~ having an outer surface exposed in entirety to ambient atmosphere and ~~not~~ no portion of which is encapsulated in said encapsulant.

6. (Currently Amended) A semiconductor package of claim 1, manufactured by the steps of:

D2

(a) attaching said die to the first surface of said die pad and electrically connecting the active surface of said die to the plurality of leads;

(b) adding encapsulant to an upper mold for sealing said die and one portion of the first surface of said plurality of leads;

(c) attaching said heat sink to the second surface of said die pad and at least ~~another~~ one portion of the second surface of leads in said plurality of leads with the thermally conductive and electrically insulating adhesive glue and

(d) forming and singulating said leadframe.

8. (Currently Amended) A semiconductor package for enhancing heat dissipation, comprising:

a die having an active surface;

a leadframe, including:

a central-hole die pad having a first surface and a second surface, said first surface being attached to said die; and

a plurality of leads electrically connected to the active surface of said die, said leads having a first surface and a second surface opposite the first surface;

an encapsulant sealing one portion of the first surface of said plurality of leads and said die in said leadframe but not sealing the second surface of the leads; and

a heat sink having a T-shape structure including a portion extending in a hole of said die pad and attached to said second surface of said die by a thermally conductive and electrically insulating adhesive glue, said heat sink also being attached to the second surface of said die pad and at least ~~another~~ a portion of the second surface of leads in said plurality of leads with said thermally conductive and electrically insulating adhesive glue, said heat sink having an outer surface ~~being~~ exposed in entirety to ambient atmosphere and

Cancel 13

~~not~~ no portion of which is encapsulated in said encapsulant.

13. (Currently Amended) The semiconductor package of claim 8, manufactured by the steps of:

D4

(a) attaching said die to the first surface of said die pad and electrically connecting the active surface of said die to the plurality of leads;

(b) adding encapsulant to an upper mold for sealing said die and one portion of the first surface of said plurality of leads;

(c) attaching said heat sink to the second surface of said die pad and at least one ~~another~~ portion of the second surface of leads in said plurality of leads with said thermally conductive and electrically insulating adhesive glue; and

(d) forming and singulating said leadframe.

15. (Currently Amended) A semiconductor package for enhancing heat dissipation, comprising:

D5

a die having an active surface;

a plurality of leads electrically connected to the active surface of said die, said leads having a first surface and a second surface opposite the first surface;

an encapsulant sealing said die and at least a portion of the first surface of said leads but not sealing the second surface of the leads; and

a heat sink attached to at least ~~another~~ a portion of the second surface of leads in said plurality of leads with a thermally conductive and electrically insulating adhesive glue, said heat sink ~~being~~ having an outer surface exposed in

entirety to ambient atmosphere and ~~not~~ no portion of which is encapsulated in said encapsulant.

20. (Currently Amended) A method of manufacturing a semiconductor package comprising the steps of:

(a) electrically connecting the active surface of a die to the plurality of leads;

(b) adding encapsulant to an upper mold for sealing said die and one portion of the first surface of said plurality of leads; and

(c) attaching said heat sink to one ~~another~~ portion of the second surface of at least some leads in said plurality of leads with a thermally conductive and electrically insulating adhesive glue, said heat sink being so attached that its entire outer surface is exposed to ambient atmosphere and no portion thereof is ~~not~~ encapsulated in said encapsulant.